IN THE SPECIFICATION:

Please replace the paragraph beginning at page 6, line 6, with the following rewritten paragraph:

--Figs. 5A and 5B are diagrams showing a method for realizing a Tp bias when a 1394 cable is used and an example of a method for realizing a Tp bias according to the present invention, respectively.--

Please replace the paragraph beginning at page 8, line 10, with the following rewritten paragraph:

--Next, a method for transmitting data rates in the 1394 communication will be described. As shown in Figs. 2A to 2C, according to the 1394 standard, data rates of S100, S200 and S400 are transmitted by setting the levels of TpB and TpB*, as bias signals which flow in the cable for transmitting the strobe signal, to mutually different predetermined levels during e.g., 100 to 120 nanoseconds.--

Please replace the paragraph beginning at page 8, line 17, with the following rewritten paragraph:

--In addition, according to the 1394 communication using the optical-fiber cable, of the present invention, the UTP cable or the STP cable, the data rates are transmitted based on the number of times certain control symbols are sent. Fig. 4 shows a table of symbols used in the present invention. In the 1394 communication using the optical-fiber cable, the UTP cable or the STP cable, data of the 1394 communication is transmitted by 4B/5B codes. The 4B/5B codes are a coding method standard used in digital data communication, and are also used in 100-Mbps

Ethernet, FDDI and so forth. Each symbol employed as a code has a different use depending on the communication method using the symbol. In any event, aside from the 4B/5B coding method, there are other types of coding methods, which will be described below.--

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Please replace the paragraph beginning at page 9, line 6, with the following rewritten paragraph:

--The 4B/5B codes have sixteen types of control symbols. The symbol "JK" is transmitted to the prefix area of a 1394 packet, and for example, the symbol "S" is used for notification of the data rate. At this time the data rate is transmitted based on the number of times that the symbol "S" is inserted (sent) in the prefix area of the 1394 packet. For instance, as shown in Fig. 3, no insertion of the symbol "S" means S100, the insertion of one "S" means S200, and the insertion of two "S"s means S400. Even if a faster data rate is added to the 1394 standard in the future, this method is capable of coping with such a case by increasing the number of times the symbol "S" is inserted. Instead of the recognition with the umber of times for sending the symbol "S", the case of sending another predetermined symbol, e.g., the symbol "R" may be recognized as S400.--

Please replace the paragraph beginning at page 9, line 21, with the following rewritten paragraph:

--Although the number of the symbols "JK" in the prefix region differs depending on each data rate, it is preferable to insert the symbol "S" used for notification of the data rate in the first half as long as circumstances permit. This is because it is preferable that data-rate

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information be recognized as early as possible. The symbol "JK" must be initially sent. The reason is that symbol synchronization needs to be performed as described above.--

Please replace the paragraph beginning at page 12, line 17, with the following rewritten paragraph:

--A physical-layer control LSI 41 shown in Fig. 6 is adapted for the UTP or STP cable. The physical-layer control LSI 41 is provided with a port 14 to which a socket 2 of a 1394 cable 5 is connected, and a port 18 to which a connector 3 of a UTP or STP cable (hereinafter referred to as "UTP/STP cable") is connected. The physical-layer control LSI 41 includes circuits for performing the 1394 standard process, and circuits for performing a process for the above-described UTP or STP transmission, which correspond to the two ports 14 and 18.--

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Please replace the paragraph beginning at page 13, line 2, with the following rewritten paragraph:

--In the physical-layer control LSI 41 there is provided a 1394 physical-layer protocol logic 11. The 1394 physical-layer protocol logic 11 executes bus initializing, arbitration, and the various processes described with reference to Figs. 1A-1D to Figs. 5A and 5B.--

Please replace the paragraph beginning at page 13, line 16, with the following rewritten

paragraph:

--A 4B/5B conversion circuit 15 for performing the 4B/5B conversion of the sending data and the 5B/4B conversion of the received data is also connected to the 1394 physical-layer protocol logic 11. An MLT-3 circuit 16 for performing the MLT (multilevel transmission)-3 coding of the sending data and the MLT-3 reverse conversion of the received data is connected to the 4B/5B conversion circuit 15, and an analog circuit 17 for performing the adjustment of sending/received-signal level and so forth is connected thereto. The analog circuit 17 is connected to the port 18, and the UTP/STP connector 3 is connected to the port 18 via an insulating transformer 4. The MLT-3 circuit 16 performs voltage-level conversion based on three-valued logic, and gives a level change when bit "1" is input. The physical-layer control LSI 41 may consist of a single integrated circuit. However, a portion shown by a dotted line in Fig. 6 may consist of another integrated circuit. Practically, it is possible to build the insulating transformer 4 into the UTP/STP connector 3.--

Please replace the paragraph beginning at page 15, line 3, with the following rewritten paragraph:

--A physical-layer control LSI 51 shown in Fig. 8 is adapted for the UTP or STP cable, and the POF cable. The physical-layer control LSI 51 is provided with a port 14 to which a socket 2 of a 1394 cable is connected, and a port 21 to which both the UTP or STP cable and the POF cable are connected. The physical-layer control LSI 51 includes an MLT-3 circuit 16 used for connection to the UTP or STP cable, and an NRZI coding circuit 20 used for connection

to the POF cable, and further includes a connector detector 22 for detecting the type of connector connected to the port 21, and first and second switches SW1 and SW2 which are controlled by the output of the connector detector 22. When the UTP or STP cable is connected to the port 21, both the first and second switches SW1 and SW2 are switched to the MLT-3 circuit 16. When the POF cable is connected to the port 21, both the first and second switches SW1 and SW2 are switched to the NRZI coding circuit 20.--

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Please replace the paragraph beginning at page 15, line 20, with the following rewritten paragraph:

--The physical-layer control LSIs 41, 31 and 51 according to the present invention have the foregoing structures. Thus, when the 1394 socket 2 is connected to the port 14, the ON condition of the bias signal is transmitted by fixing TpA and TpA* at the high level as shown in Fig. 5A, and the data rate is transmitted based on the levels of TpB and TpB* as shown in Figs. 2A to 2C.--

IN THE CLAIMS:

Please cancel Claims 1-14.

Please add the following Claims 15-41:

--15. A data communication method comprising the steps of:

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connecting a plurality of electronic devices provided with a communication interface